

CLAIMS

What is claimed is:

5 1. A latch comprising:
a housing;
a pawl pivotally supported by said housing, said pawl being movable between a
latched position and an unlatched position;
biasing means biasing said pawl toward said unlatched position; and
10 a locking member rotationally supported relative to said housing, said locking
member being rotationally movable about an axis of rotation between an open position and a
locked position, said locking member interfering with movement of said pawl such that said
pawl is maintained in said latched position when said pawl is in said latched position and
said locking member is in said locked position, said locking member allowing said pawl to
15 move to said unlatched position when said locking member is in said open position.

20 2. The latch according to claim 1, further comprising an electric motor supported
in stationary relationship relative to said housing, said electric motor being operationally
linked to said locking member to selectively cause rotation of said locking member about
said axis of rotation.

25 3. The latch according to claim 2, further comprising a lockplug supported for
selective rotation relative to said housing, said lockplug being operationally linked to said
locking member to selectively cause rotation of said locking member about said axis of
rotation.

4. The latch according to claim 3, further comprising a lockplug member adapted
for receiving said lockplug.

5. The latch according to claim 4, further comprising a second biasing means biasing said lockplug and said lockplug member.

6. The latch according to claim 5, wherein said second biasing means is a
5 spring.

7. The latch according to claim 4, wherein said lockplug member includes a biasing retaining tab protruding outward from one side of said lockplug member.

10 8. The latch according to claim 3, wherein said lockplug is biased towards a central position.

9. The latch according to claim 3, wherein said lockplug includes a key slot.

15 10. The latch according to claim 2, further comprising a motor housing adapted for supporting said motor.

11. The latch according to claim 10, wherein said locking member is pivotally secured between said housing and said motor housing.

20 12. The latch according to claim 2, further comprising at least one gearbox interposed between said locking member and said motor, said gearbox being adapted for
engaging with said locking member and said motor.

25 13. The latch according to claim 2, wherein said motor is a DC motor.

14. The latch according to claim 2, further comprising at least one switch, said switch including a cantilever wherein said cantilever makes contact with said locking

member and moves about a depressed position and a released position as said locking member rotatably moves respectively about said open position and said locked position.

15. The latch according to claim 14, wherein said cantilever terminates in a roller
5 and said roller makes contact with said locking member.

16. The latch according to claim 14, wherein said at least one switch further includes at least one contact about said cantilever such that depressing said cantilever closes an electrical circuit and releasing said cantilever opens the circuit.

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17. The latch according to claim 14, wherein said at least one switch is a pair of switches, each of said pair of switches having a cantilever such that said cantilever of one of said pair of switches is released when said locking member is in said locked position and said cantilever of the other of said pair of switches is released when said locking member is
15 in said open position.

18. The latch according to claim 14, wherein said housing includes at least one riser positioned for retaining said at least one switch.

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19. The latch according to claim 1, further comprising a lockplug supported for selective rotation relative to said housing, said lockplug being operationally linked to said locking member to selectively cause rotation of said locking member about said axis of rotation.

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20. The latch according to claim 19, further comprising a lockplug member adapted for receiving said lockplug.

21. The latch according to claim 20, further comprising a second biasing means biasing said lockplug and said lockplug member.

22. The latch according to claim 21, wherein said second biasing means is a
5 spring.

23. The latch according to claim 20, wherein said lockplug member includes a biasing retaining tab protruding outward from one side of said lockplug member.

10 24. The latch according to claim 19, wherein said lockplug is biased towards a central position.

25. The latch according to claim 19, wherein said lockplug includes a key slot.

15 26. The latch according to claim 1, wherein said pawl is biased towards said unlatched position.

27. The latch according to claim 1, wherein said locking member is biased away from said open position.

20 28. The latch according to claim 1, wherein said biasing means is a spring.

29. The latch according to claim 1, further comprising at least one switch, said switch including a cantilever wherein said cantilever makes contact with said locking
25 member and moves about a depressed position and a released position as said locking member rotatably moves about said open position and said locked position.

30. The latch according to claim 29, wherein said cantilever terminates in a roller and said roller makes contact with said locking member.

31. The latch according to claim 29, wherein said housing includes at least one 5 riser positioned for retaining said at least one switch.

32. The latch according to claim 1, wherein said pawl includes a locking member 10 engaging tooth, a first arm, a second arm, and a slot defined between said arms, said arms are generally parallel and opposite said locking member engaging tooth, said slot is dimensioned and configured to receive a keeper.

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